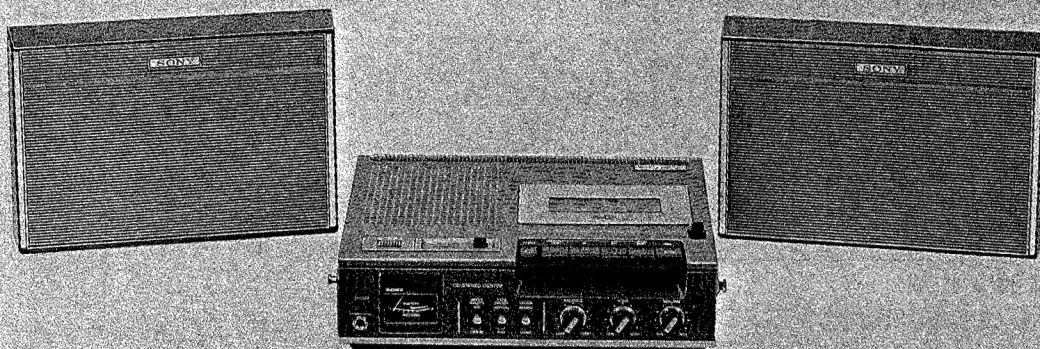


TC-520CS

504

US Model
Canadian Model
UK Model
AEP Model
E Model



STEREO CASSETTE-CORDER

SPECIFICATIONS

Power Requirements:	120V ac, 60 Hz (US, Canadian model) 240V ac, 50 Hz (UK model) 110, 127, 220 or 240V ac, 50 Hz (AEP model) 100–110, 115–127, 200–220 or 230–250V ac, 50/60 Hz (E model) 6V dc Battery size-D (IEC designation R20), 4 pcs Rechargeable battery BP-8H (optional) Car battery cord DCC-129 (optional) for 12V car battery	Total Harmonic Distortion:	2.5%
Power Consumption:	7W ac (US, Canadian model) 10W ac (E model) 14W ac (UK, AEP model)	Battery Life:	In continuous recording with built-in microphone: Approx. 6 hours with Sony long-life battery size-D
Power Output:	(US model) 2W (1W x 2) max. with external speakers 1W max. with the built-in speaker (UK model) 2.2W (1.1W x 2) max. with external speakers 1.1W max. with the built-in speaker (Canadian, AEP, E model) 3W (1.5W x 2) max. with external speakers 1.5W max. with the built-in speaker	Inputs:	MIC (two minijacks) Sensitivity: 0.2 mV (–72 dB) Impedance: for low-impedance microphone LINE IN (two minijacks) Sensitivity: 0.06 V (–22 dB) Impedance: 1,000 k Ω
Speakers:	Built-in speaker 10 cm (4 inches) dia. External speakers 10 cm (4 inches) dia.	Outputs:	SPEAKER (two minijacks) Load impedance: for 8 Ω -impedance speakers PHONES (stereo binaural jack) Load impedance: for 8 Ω -impedance headphones
Track:	4-track 2-channel stereo or monaural	Other Jack:	REMOTE REC/PB (UK, AEP, E model)
Fast Winding Time:	Approx. 1 minutes 30 seconds with Sony cassette C-60	Dimensions:	280 (w) x 90 (h) x 245 (d) mm 11 $\frac{1}{8}$ (w) x 3 $\frac{5}{8}$ (h) x 9 $\frac{3}{4}$ (d) inches incl. projecting parts and controls
Frequency Response:	(US, Canadian, AEP, E model) 50–10,000 Hz with standard cassette 50–13,000 Hz with chromium dioxide cassette (UK model) 60–10,000 Hz with standard cassette 60–13,000 Hz with chromium dioxide cassette	Weight:	3.4 kg, 7 lb 8 oz with batteries
Wow and Flutter:	0.26% (RMS) weighted	SAFETY-RELATED COMPONENT WARNING!! COMPONENTS IDENTIFIED BY SHADING ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.	
S/N Ratio:	45 dB		

SONY®


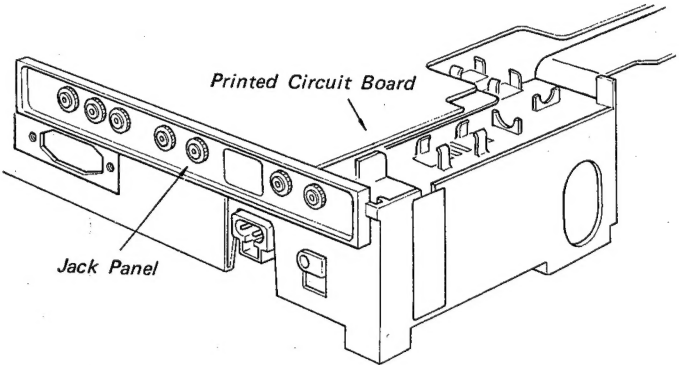


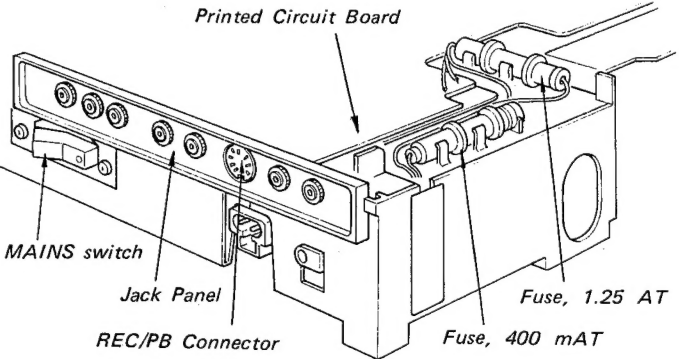
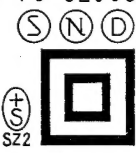
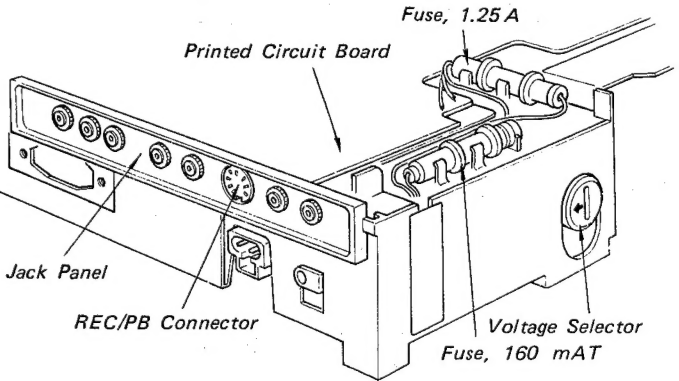
SERVICE MANUAL

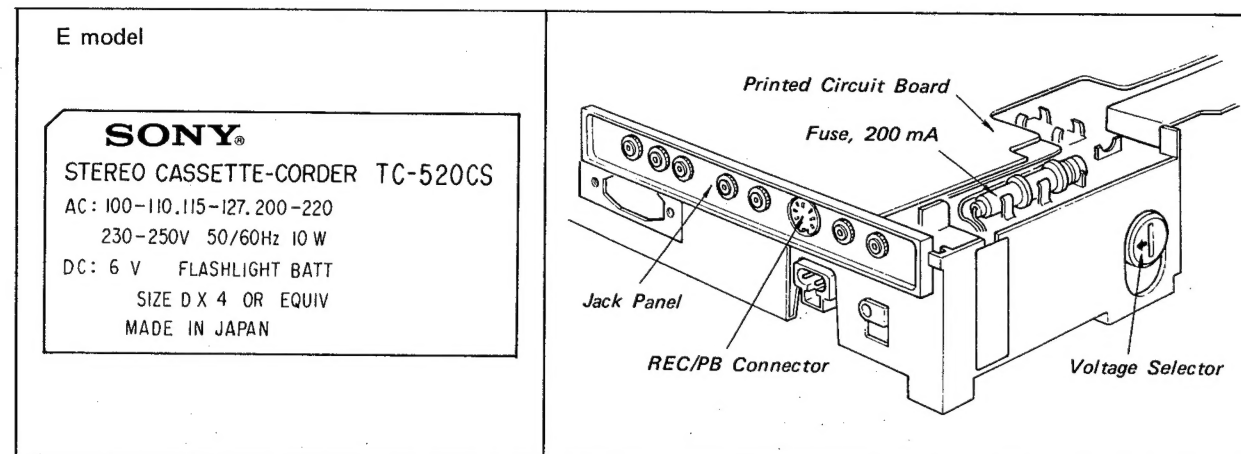
504

C-520CS

IDENTIFICATION OF SET

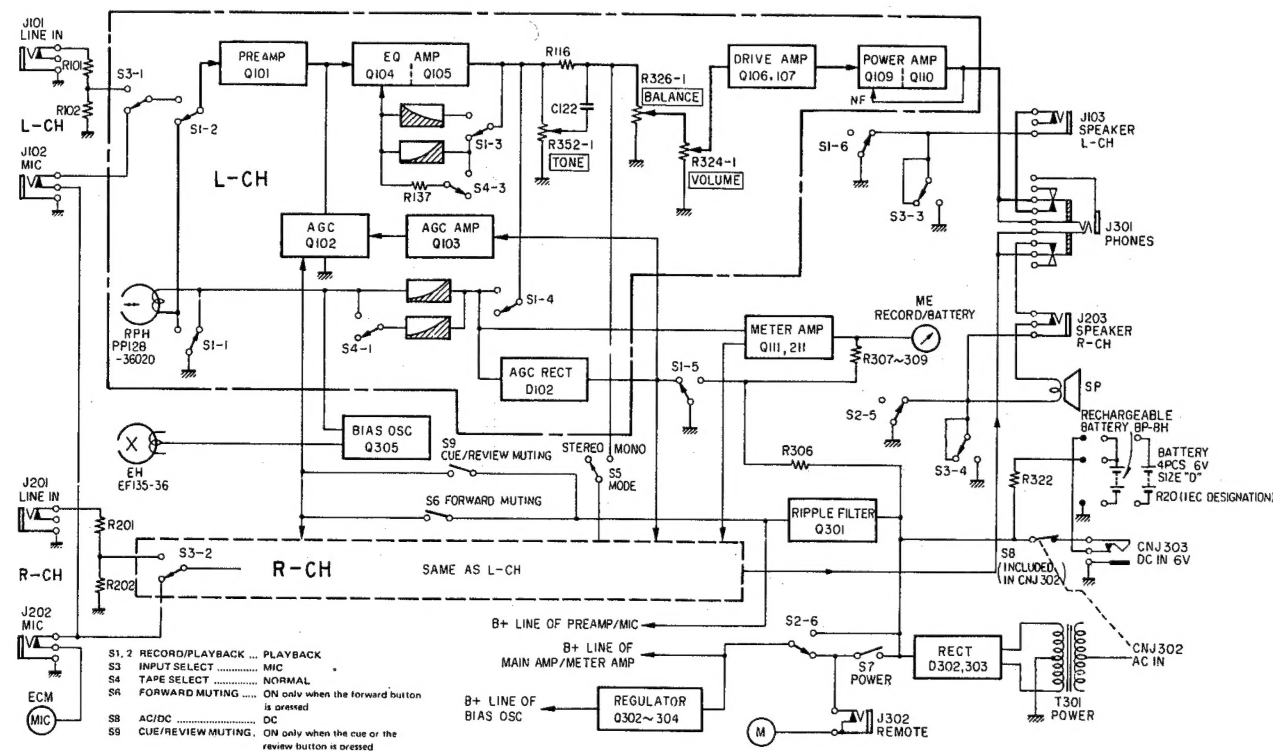
TC-520CS is classified by the specification label as shown below.

Specification Label	Jack Side View with lower case removed
<p>US model</p> <div> <p>SONY® STEREO CASSETTE-CORDER TC-520CS AC: 120V 60Hz 7 W DC: 6 V FLASHLIGHT BATT SIZE D X 4 OR EQUIV</p> <p> MADE IN</p> </div>	
<p>Canadian model</p> <div> <p>SONY® STEREO CASSETTE-CORDER TC-520CS AC: 120V 60Hz 7 W DC: 6 V FLASHLIGHT BATT SIZE D X 4 OR EQUIV</p> <p> MADE IN</p> </div>	
<p>UK model</p> <div> <p>SONY® STEREO CASSETTE-CORDER TC-520CS AC: 240V ~ 50Hz 14 W DC: 6 V FLASHLIGHT BATT SIZE D X 4 OR EQUIV</p> <p> MADE IN</p> </div>	
<p>AEP model</p> <div> <p>SONY® STEREO CASSETTE-CORDER TC-520CS AC: 110, 127, 220, 240V ~ 50 Hz 14 W DC: 6 V FLASHLIGHT BATT SIZE D X 4 OR EQUIV</p> <p> MADE IN</p> </div>	



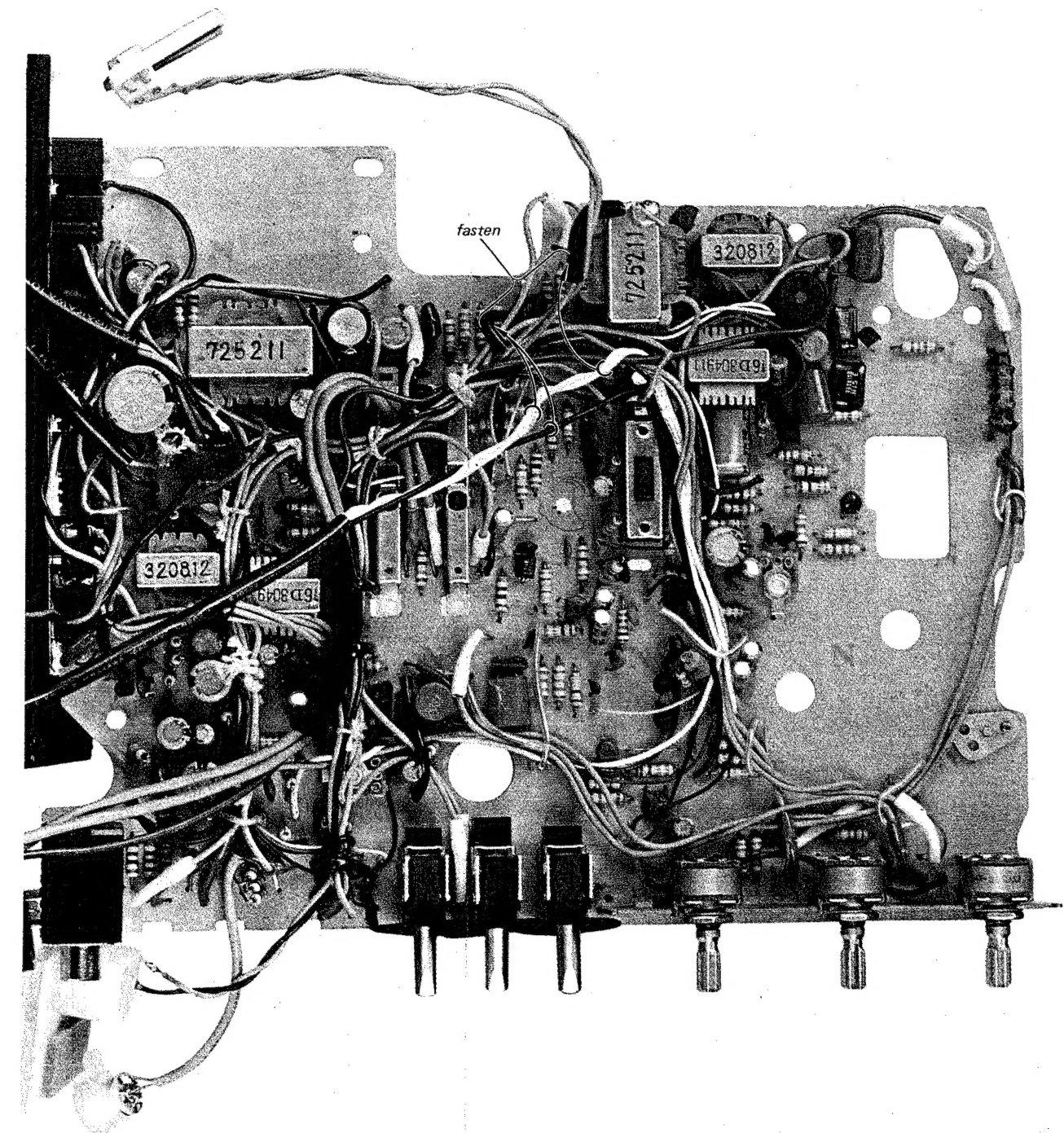
SECTION 1 OUTLINE

1-1. BLOCK DIAGRAM



1-2. INTERNAL VIEW

Top view with circuit board removed.

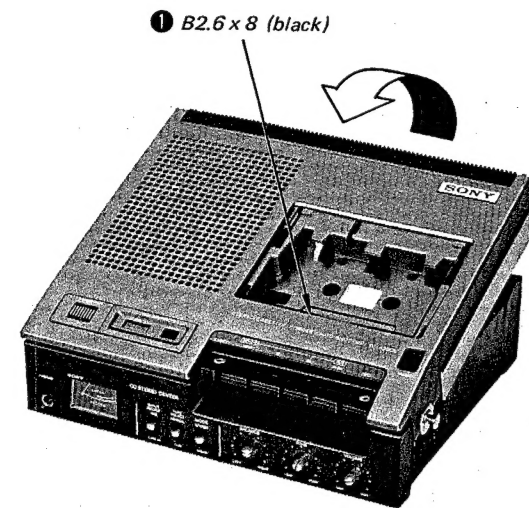


SECTION 2 DISASSEMBLY AND REPLACEMENT

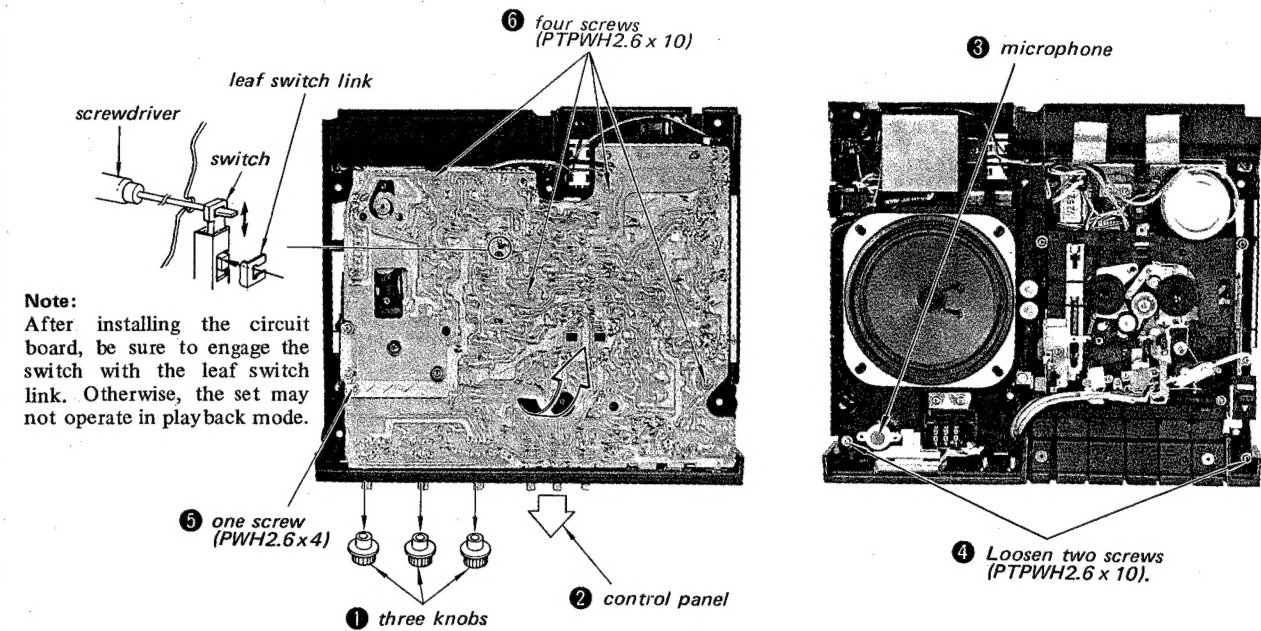
LOWER CASE REMOVAL

Remove six screws (B3 x 14, self-tapping) on the lower case.

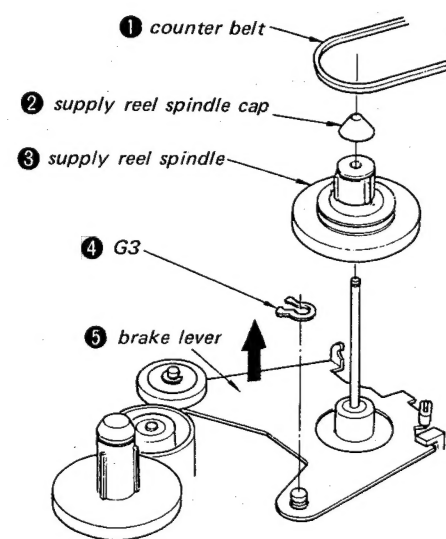
UPPER CASE REMOVAL



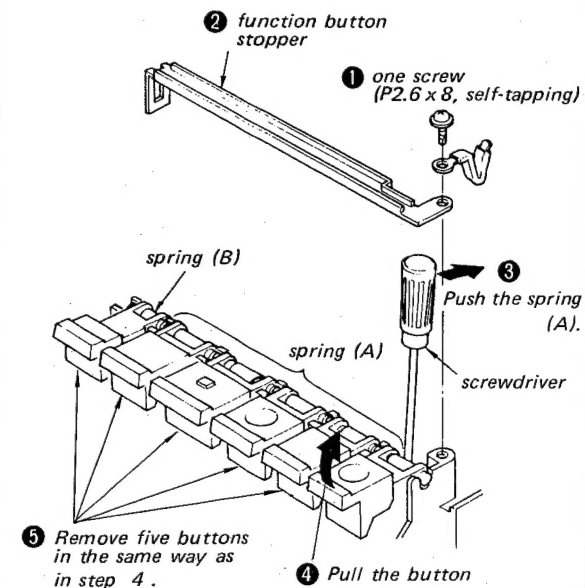
CIRCUIT BOARD REMOVAL



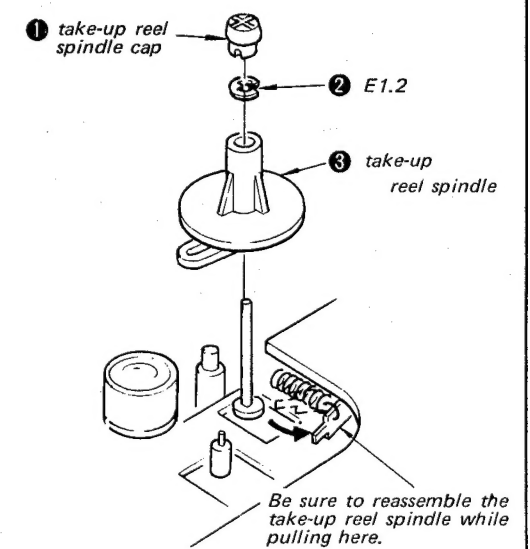
BRAKE LEVER REMOVAL



FUNCTION BUTTON REMOVAL

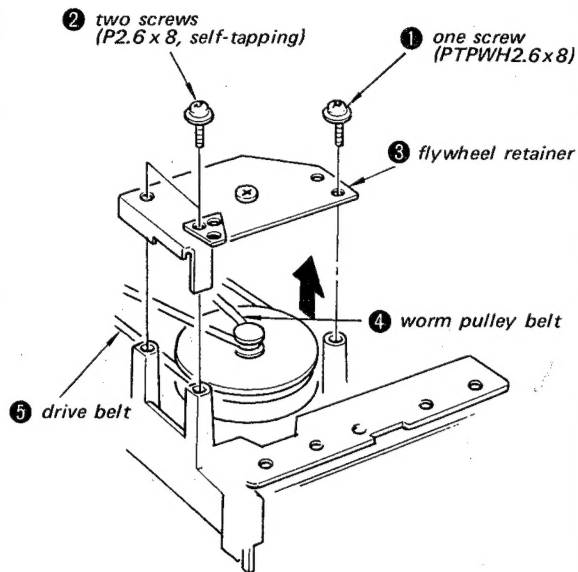


TAKE-UP REEL SPINDLE REMOVAL

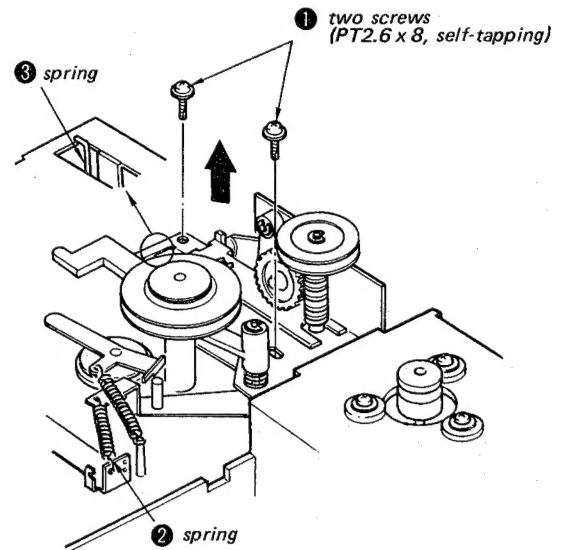


Note: FLYWHEEL REMOVAL can be performed after removing the complete circuit board or the main chassis.

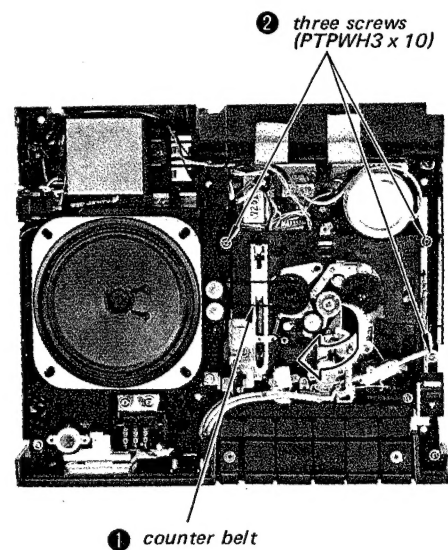
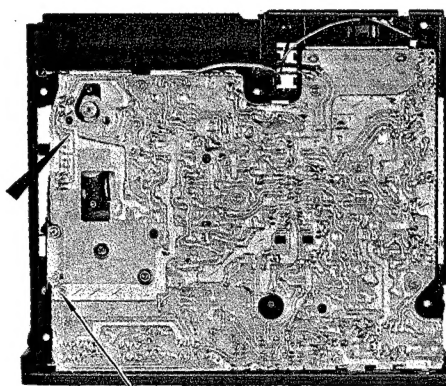
FLYWHEEL REMOVAL



SHUT-OFF BLOCK REMOVAL



MAIN CHASSIS REMOVAL



SECTION 3 ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured-alcohol-moistened swab:

record/playback head	pinch roller
erase head	rubber belts
capstan	idlers
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the
4. After the adjustments, apply a suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

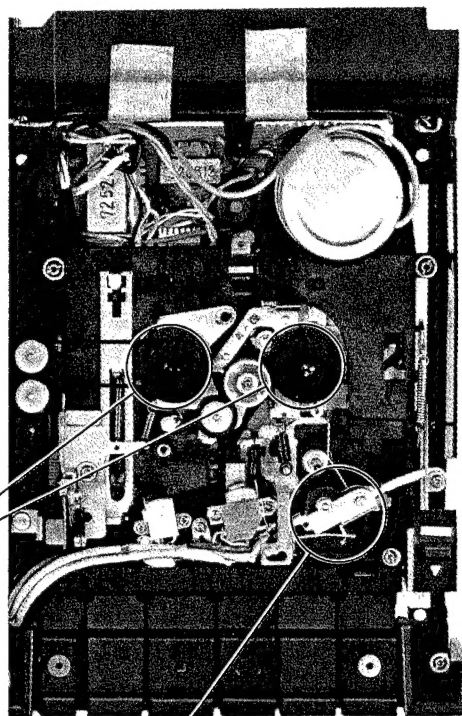
3-1. MECHANICAL ADJUSTMENTS AND MEASUREMENTS

Forward Torque Measurement

Torque meter	Meter reading
SONY CQ-101A, 102A, 103A	20~50 g.cm (0.28~0.69 oz.inch)

Fast Forward and Rewind Torque Measurement

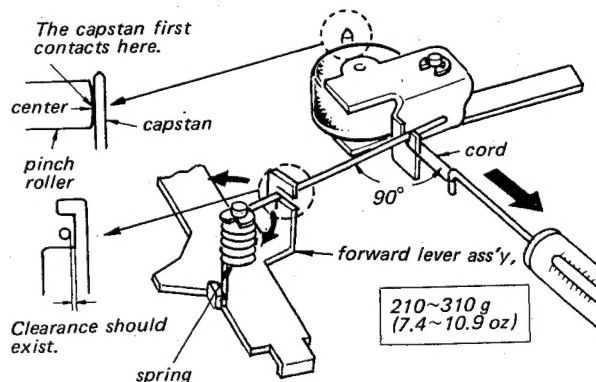
Torque meter	Meter reading
SONY CQ-201A	52~97 g.cm (0.72~1.35 oz.inch)



Pinch Roller Pressure Adjustment

— Playback Mode —

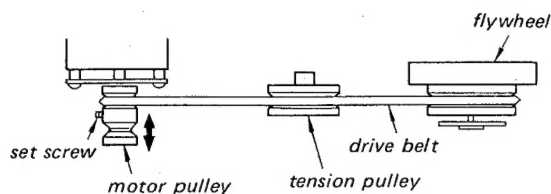
1. Pull the spring scale.
2. Slowly return the pinch roller and read the spring scale just when the pinch roller starts to rotate.
3. If necessary, bend or replace the spring.



Motor Pulley Height Adjustment

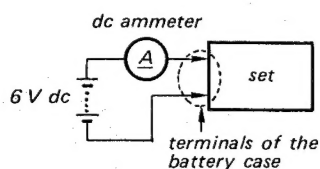
Note: Perform this adjustment after replacing the motor or the motor pulley.

1. Place the set horizontal.
2. Loosen the set screw and adjust the position of the motor pulley so that the drive belt becomes straight.
3. Tighten the set screw.

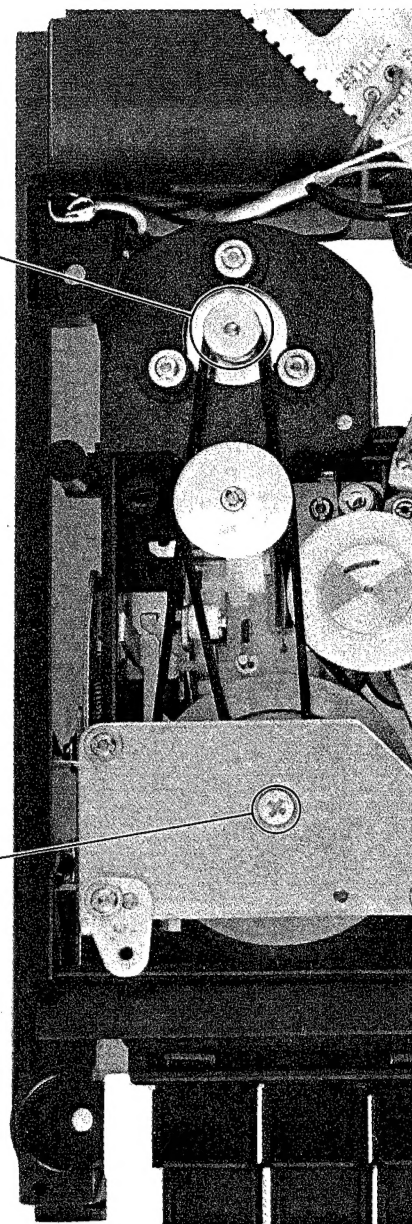


Flywheel Thrust Play Adjustment

— Playback Mode —



1. Horizontally place the set the reel-spindle-side down.
2. Loosen the adjustment screw.
3. Gradually turn the adjustment screw clockwise and stop it when the motor current suddenly increases.
4. Turn the adjustment screw $\frac{1}{4}$ turn counterclockwise and secure it with a locking compound.



3-2. ELECTRICAL ADJUSTMENTS

Note: The adjustments should be performed in the order given in this service manual. The adjustments should be performed for both L-CH and R-CH.

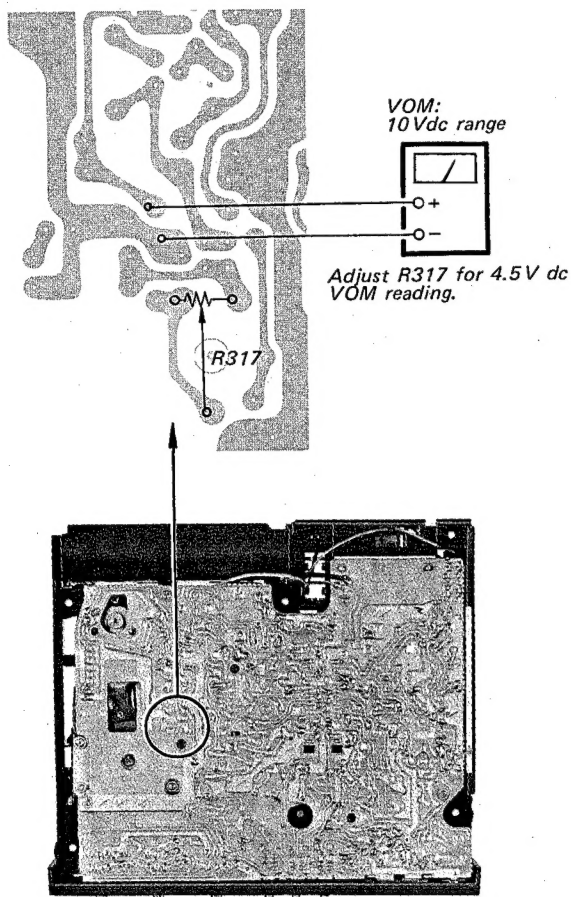
B+ Voltage Adjustment

Settings:

Power source 6V dc

Mode record without signal

Procedure and Adjustment Location:



Tape Speed Adjustment

Setting:

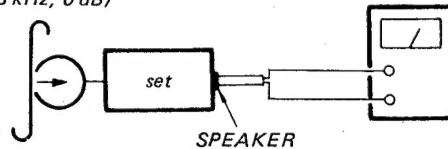
Power source 6V dc

Procedure:

1. Mode playback

test tape
WS-48
(3 kHz, 0 dB)

speed checker (LFM-30) or
digital frequency counter



Specifications

- 1)

Speed checker	Digital frequency counter
$\pm 1\%$	2970 Hz~3030 Hz
- 2) Frequency difference between beginning and end of tape should be within 1% (30 Hz).

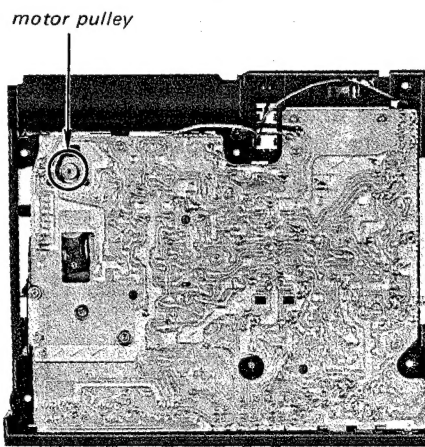
2. If necessary, replace motor pulley.

3-701-813-□□
Pulley, motor



Part No.	Mark	Tape Speed
3-701-813-	06	L
		M
	07	N
		P
	08	Q
		down ↑ up

Adjustment Location:



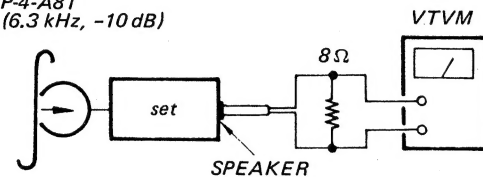
Record/playback Head Azimuth Adjustment

Settings:

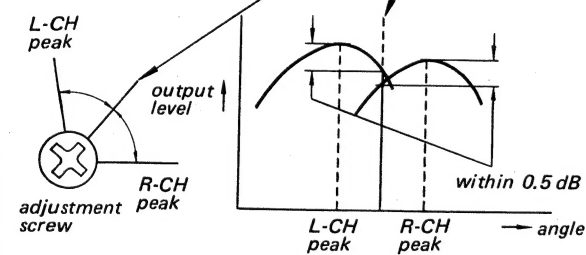
TONE switch HIGH position
Mode playback

Procedure:

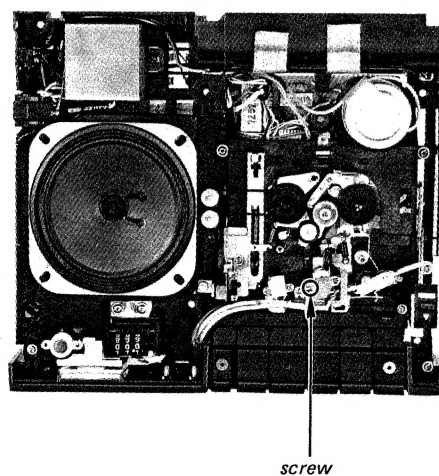
test tape
P-4-A81
(6.3 kHz, -10 dB)



Turn the adjustment screw for the maximum level and set it the mechanical mid position of L-CH and R-CH peak position.



Adjustment Location:



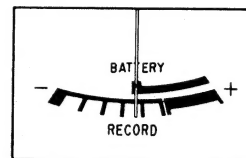
Record/battery Meter Calibration

Settings:

Mode playback without cassette
Power source 4.4 V dc

Procedure:

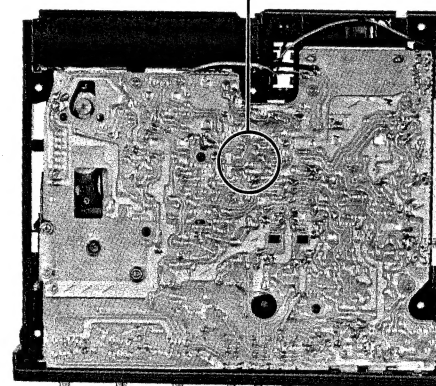
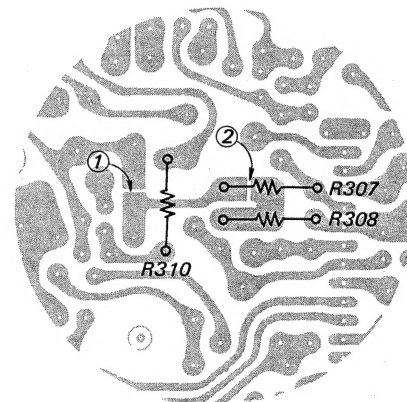
1. Push the forward button without a cassette.
2. The pointer indication should be as shown below.



3. If necessary, solder ① or ②.

Soldering Portion	Pointer
①	+ mark
nothing	↕
②	- mark

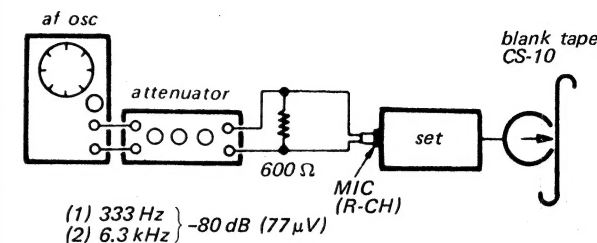
Adjustment Location:



Record Bias Adjustment

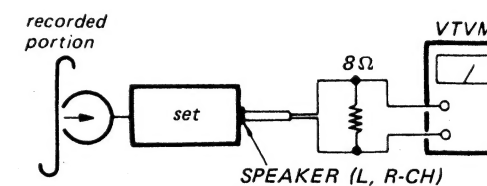
Procedure:

1. Mode record



(1) 333 Hz } -80 dB (77 μV)
(2) 6.3 kHz }

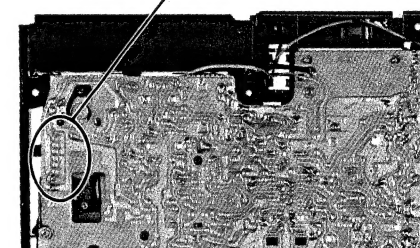
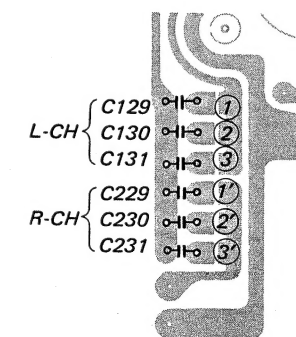
2. Mode playback



Select a soldering portion for each channel to obtain the smallest difference between the 333 Hz and 6 kHz signal output levels.

Soldering portion		6.3 kHz signal output level
L-CH	R-CH	
①	①'	up ↓ down
②	②'	
③	③'	

Adjustment Location:



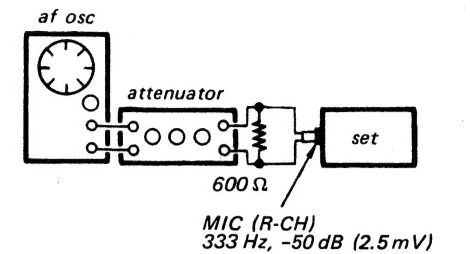
AGC Stereo Balance Adjustment

Setting:

MODE switch STEREO

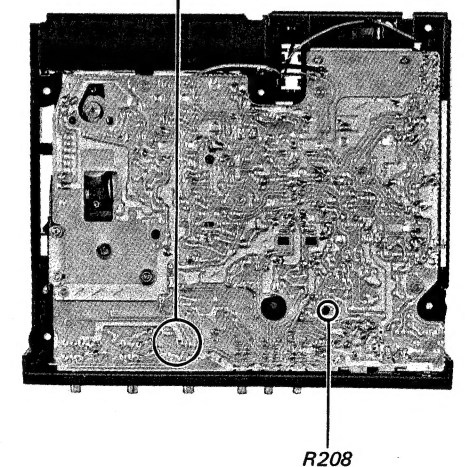
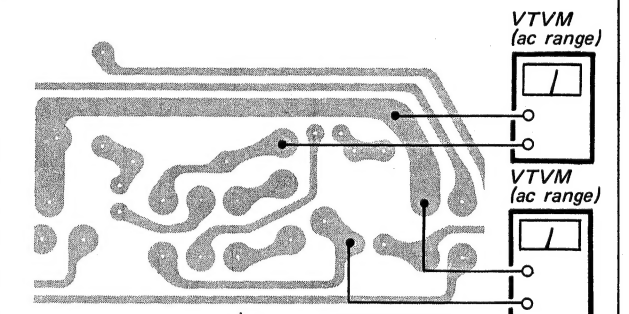
Procedure:

Mode record



Adjust R208 for the same VTVM readings.

Adjustment Location:



SECTION 4
DIAGRAMS

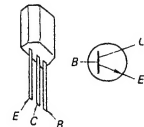
4-1. MOUNTING DIAGRAM

— Conductor Side —

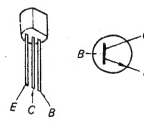
US model : Up to serial No. 12,000

Canadian model : Up to serial No. 10,500

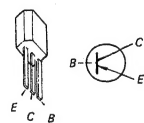
Q101, 201 : 2SC631A
Q104, 204 :
Q102, 202 : 2SC633A
Q103, 203 :
Q105~108 :
Q205~208 :
Q111, 211 :
Q301, 303~305 :



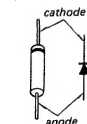
Q109, 209 : 2SC1474
Q110, 210 :



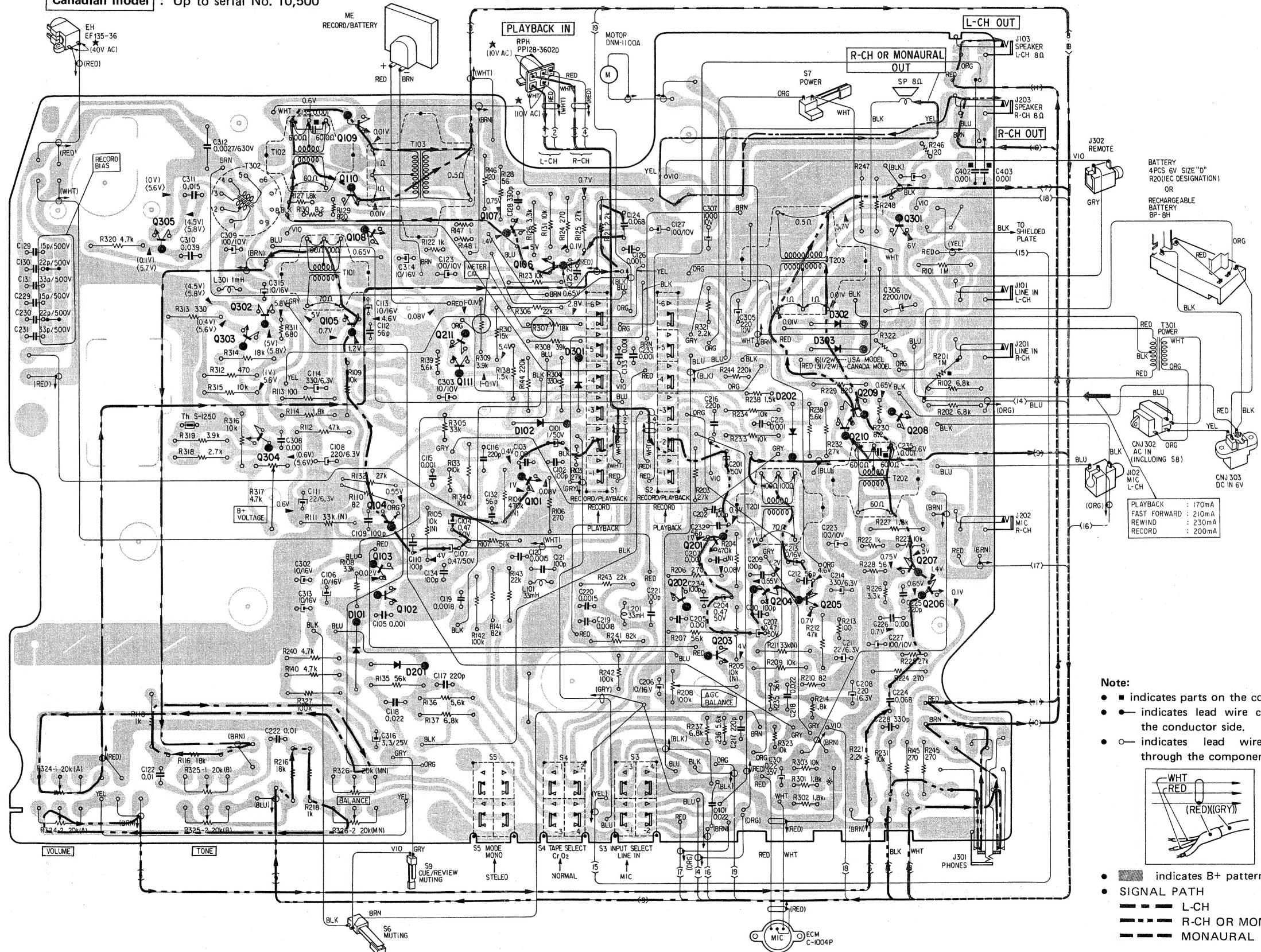
Q302: 2SA677



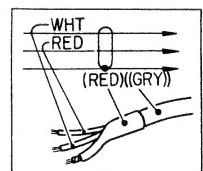
D101, 102 : 1T40
D201, 202 :
D301: 1T22
D302, 303: 10E1



D	Q
	109
	110
108 301	107
305	106
302	105
303	211
301	111
102 202	209
202	208
	210
	304
	101
	104
	201
103 207	
102 204	206
202 205	
101 201	203



- Note:**
- indicates parts on the conductor side.
 - indicates lead wire connection on the conductor side.
 - indicates lead wire connection through the component side.

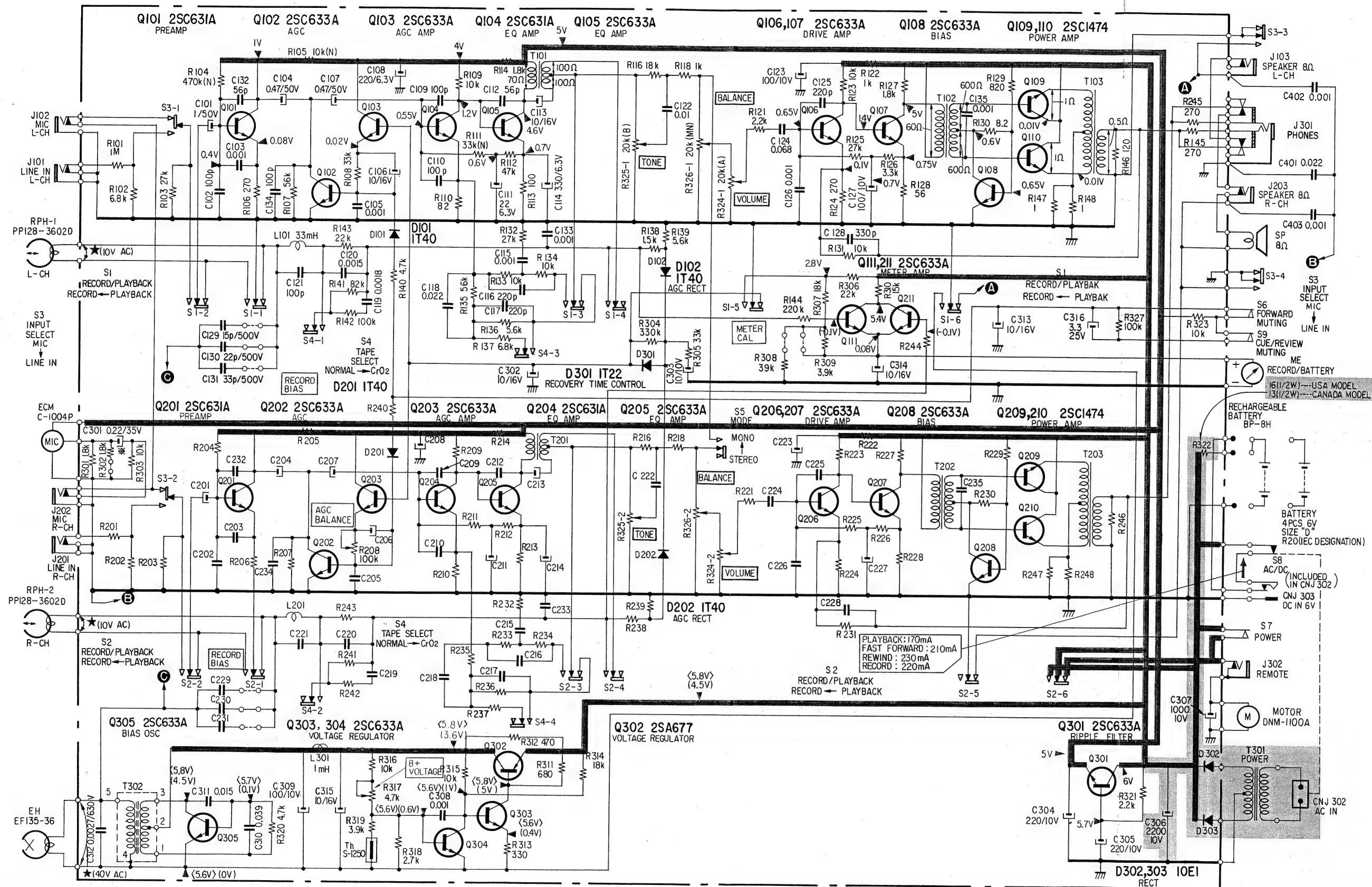


- indicates B+ pattern.
- SIGNAL PATH
 - L-CH
 - R-CH OR MONAURAL
 - MONAURAL

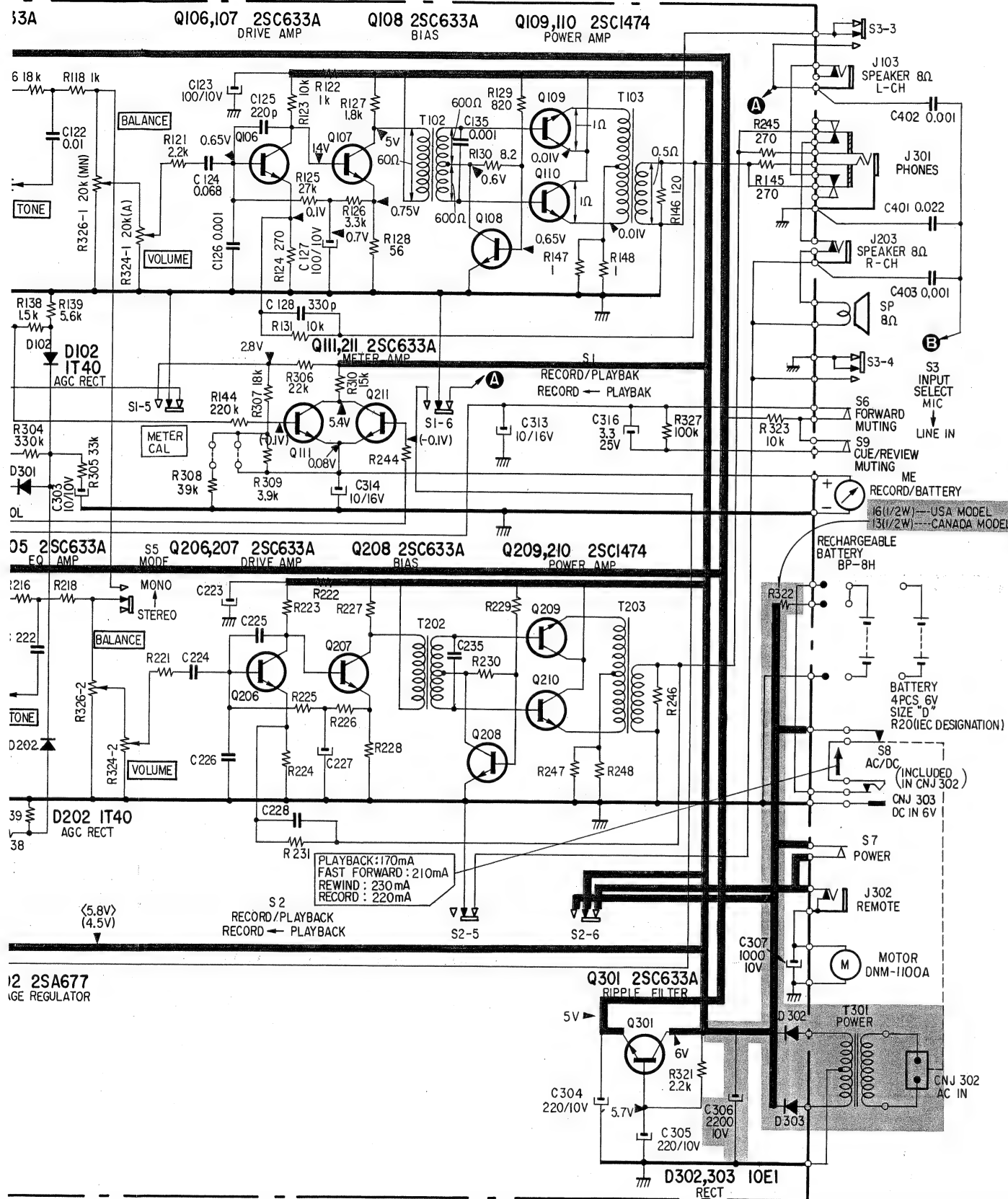
4-2. SCHEMATIC DIAGRAM

US model : Up to serial No. 12,000
Canadian model : Up to serial No. 10,500



Note: The components identified by shading are critical for safety. Replace only with part number specified.



The components identified by shading are critical for safety. Replace only with part number specified.



Note:

- All capacitors are in μF unless otherwise noted.
- 50 or less working voltages are omitted except for electrolytic type. $p = \mu\text{F}$
- All resistors are in Ω , $\frac{1}{4}\text{W}$, unless otherwise noted.
 $k = 1,000 \quad M = 1,000k$
-  indicates chassis ground.
- (N) indicates a low-noise resistor.
-  indicates B+ circuit.
- Voltages are DC with respect to ground unless otherwise noted. Readings are taken under no-signal conditions with a VOM (20 $k\Omega/V$).
 () : in record mode no mark: common
 < > : in playback mode
 * : measured with VTVM
- Voltage variations may be noted due to normal production tolerances.
- Total current is measured with no cassette loaded.
- DC resistance value of transformer is measured on the mounted board.
 The average value is indicated.
- In using an electret condenser microphone with red mark on side of case, connect R302 shown with * in parallel with R301.
- S6: ON only when the forward button is pressed.
- S9: ON only when the cue or the review button is pressed.
- Switch Mode:

Ref. No.	Switch	Position
S1	RECORD/PLAYBACK	PLAYBACK
S2	RECORD/PLAYBACK	PLAYBACK
S3	INPUT SELECT	MIC
S4	TAPE SELECT	NORMAL
S5	MODE	STEREO
S6	FORWARD MUTING	OFF
S7	POWER	OFF
S8	AC/DC (included in CNJ302)	DC
S9	CUE/REVIEW MUTING	OFF

E, AEP, UK model

US model : Serial No. 12,001 and later

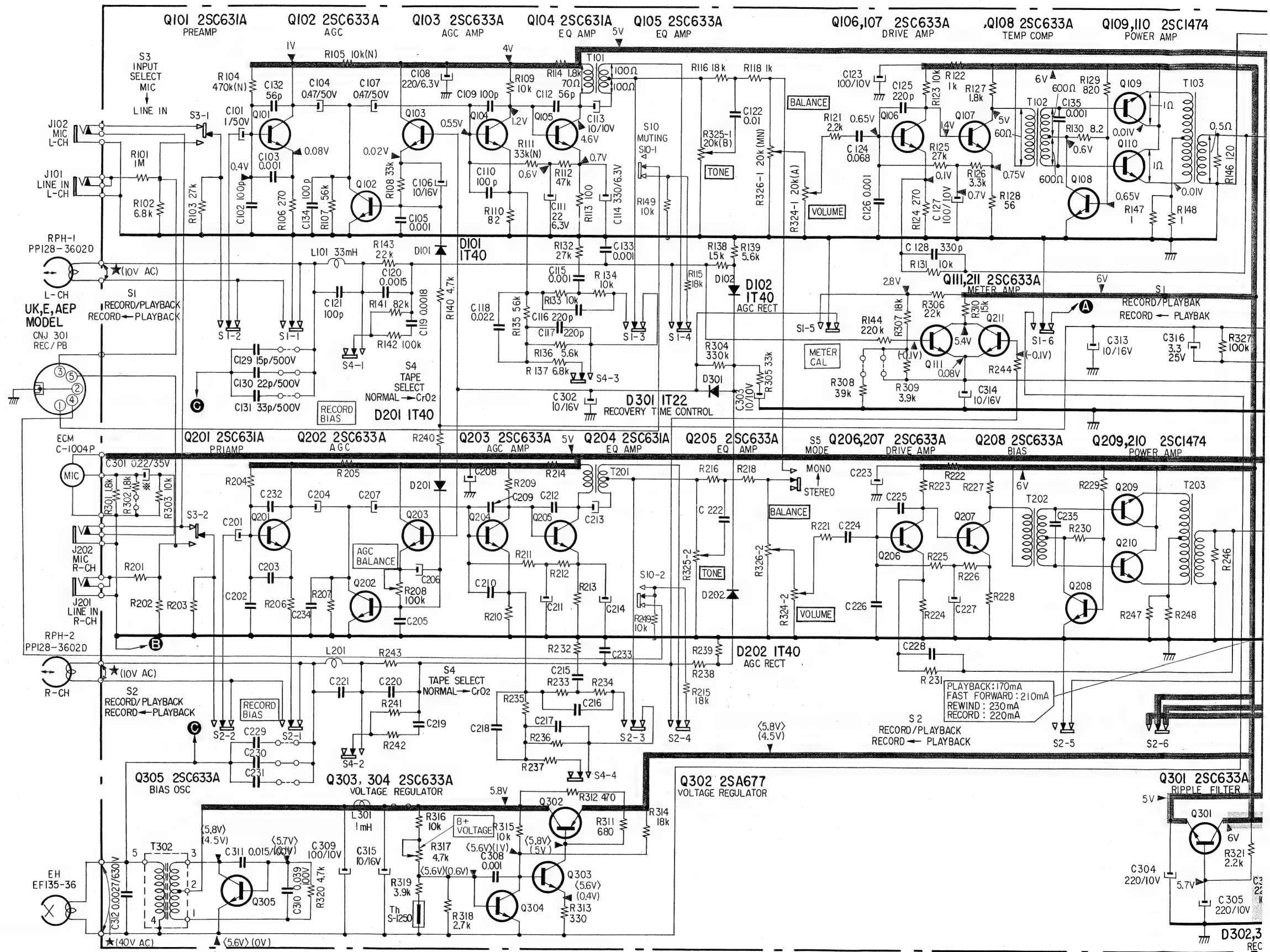
Canadian model : Serial No. 10,501 and later

Note: The components identified by shading are critical for safety. Replace only with part number specified.

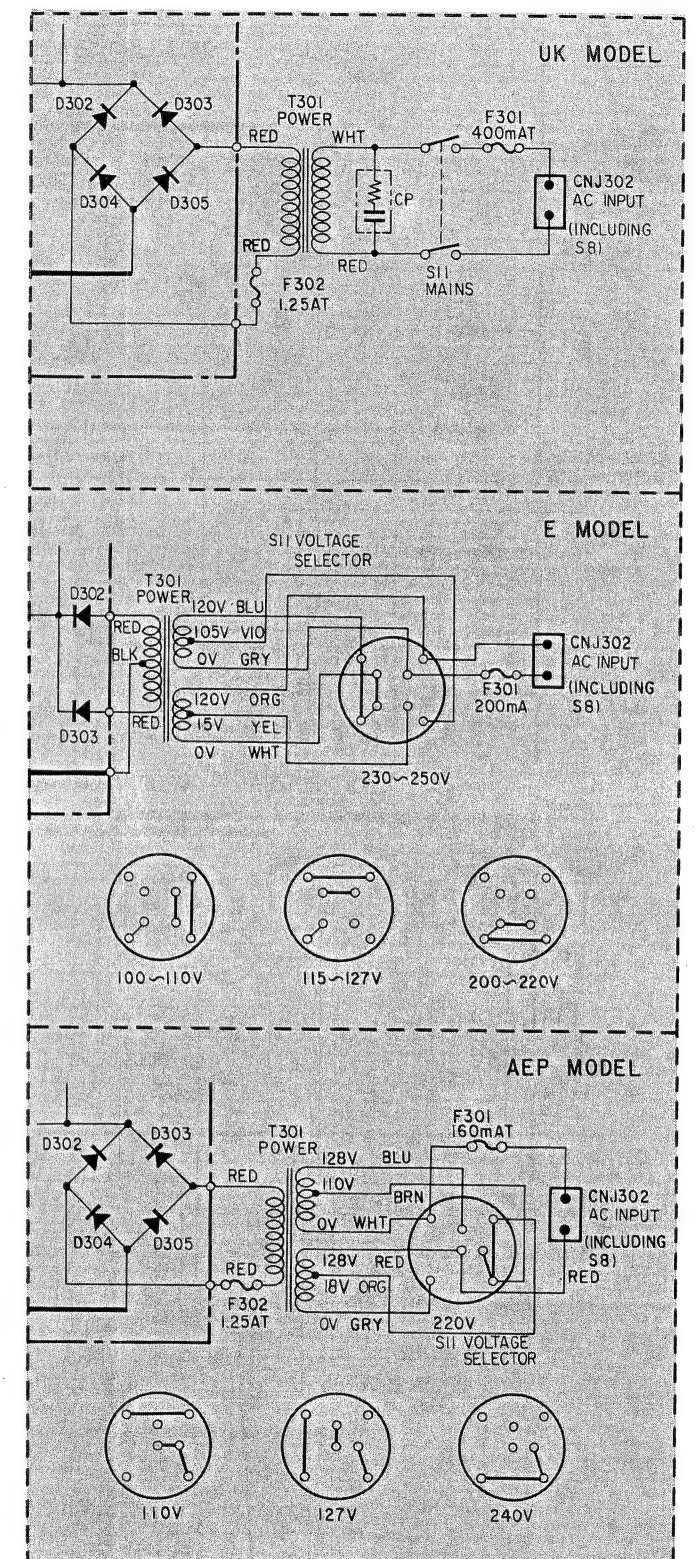
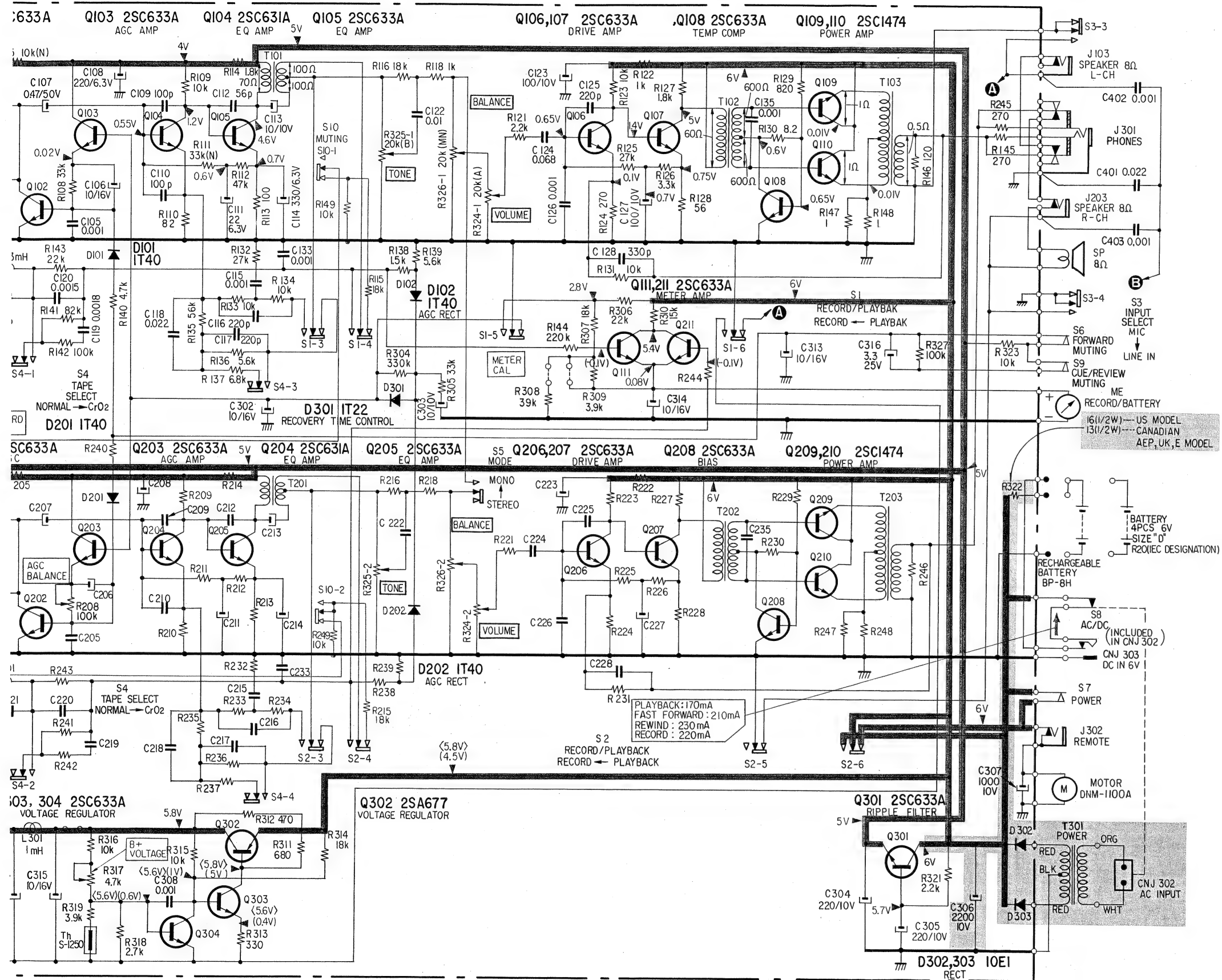
4-3. SCHEMATIC DIAGRAM

- Note:**
- All capacitors are in μF unless otherwise noted. 50 or less working voltages are omitted except for electrolytic type. $\text{p} = \mu\text{F}$
 - All resistors are in Ω , $\frac{1}{4}\text{W}$, unless otherwise noted. $\text{k} = 1,000$ $\text{M} = 1,000\text{k}$
 - Indicates chassis ground.
 - (N) indicates a low-noise resistor.
 - Indicates B+ circuit.
 - Voltages are DC with respect to ground unless otherwise noted. Readings are taken under no-signal conditions with a VOM (20 $\text{k}\Omega/\text{V}$).
 - () : in record mode no mark: common
 - () : in playback mode
 - * : measured with VTVM
 - Voltage variations may be noted due to normal production tolerances.
 - Total current is measured with no cassette loaded.
 - DC resistance value of transformer is measured on the mounted board.
 - The average value is indicated.
 - In using an electret condenser microphone with red mark on side of case, connect R302 shown with * in parallel with R301.
 - S6: ON only when the forward button is pressed.
 - S9: ON only when the cue or the review button is pressed.
 - Switch Mode:

Ref. No.	Switch	Position
S1	RECORD/PLAYBACK	PLAYBACK
S2	RECORD/PLAYBACK	PLAYBACK
S3	INPUT SELECT	MIC
S4	TAPE SELECT	NORMAL
S5	MODE	STEREO
S6	FORWARD MUTING	OFF
S7	POWER	OFF
S8	AC/DC (included in CNJ302)	DC
S9	CUE/REVIEW MUTING	OFF
S10	MUTING (E, AEP, UK model)	ON
S11	MAINS	OFF (UK model) 220V (AEP model) 230~250V (E model)
S11	VOLTAGE SELECTOR	



Note: The components identified by shading are critical for safety. Replace only with part number specified.



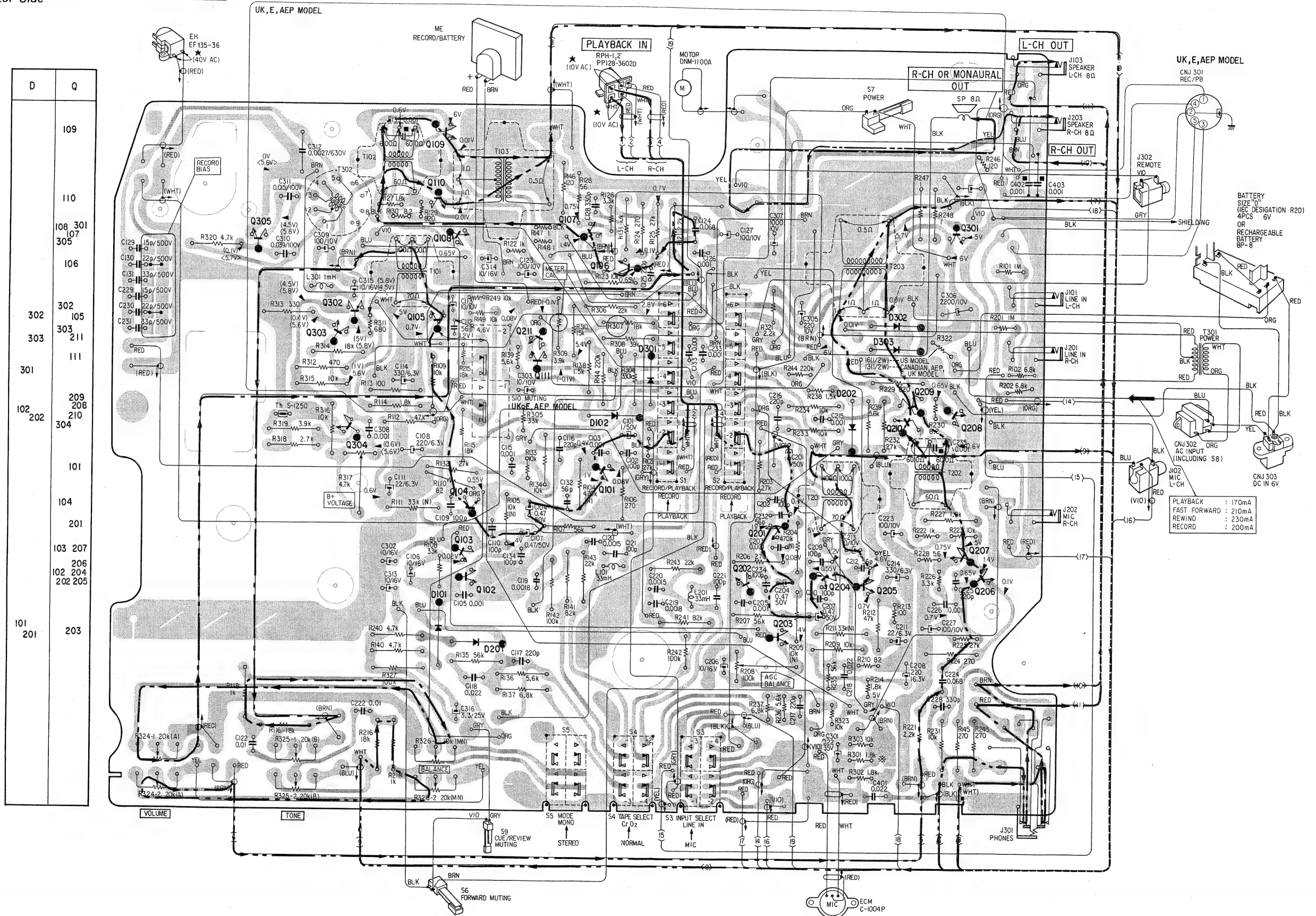
4-4. MOUNTING DIAGRAM

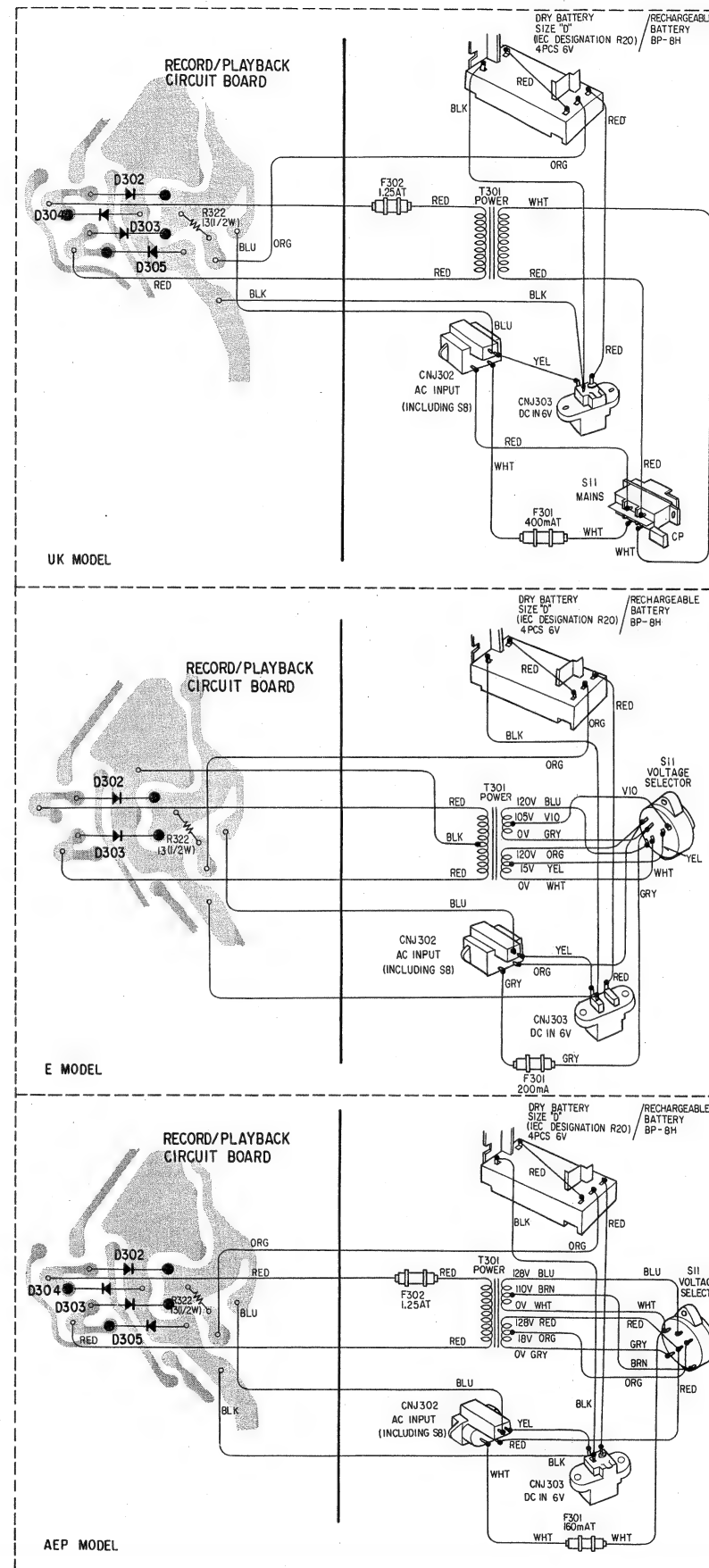
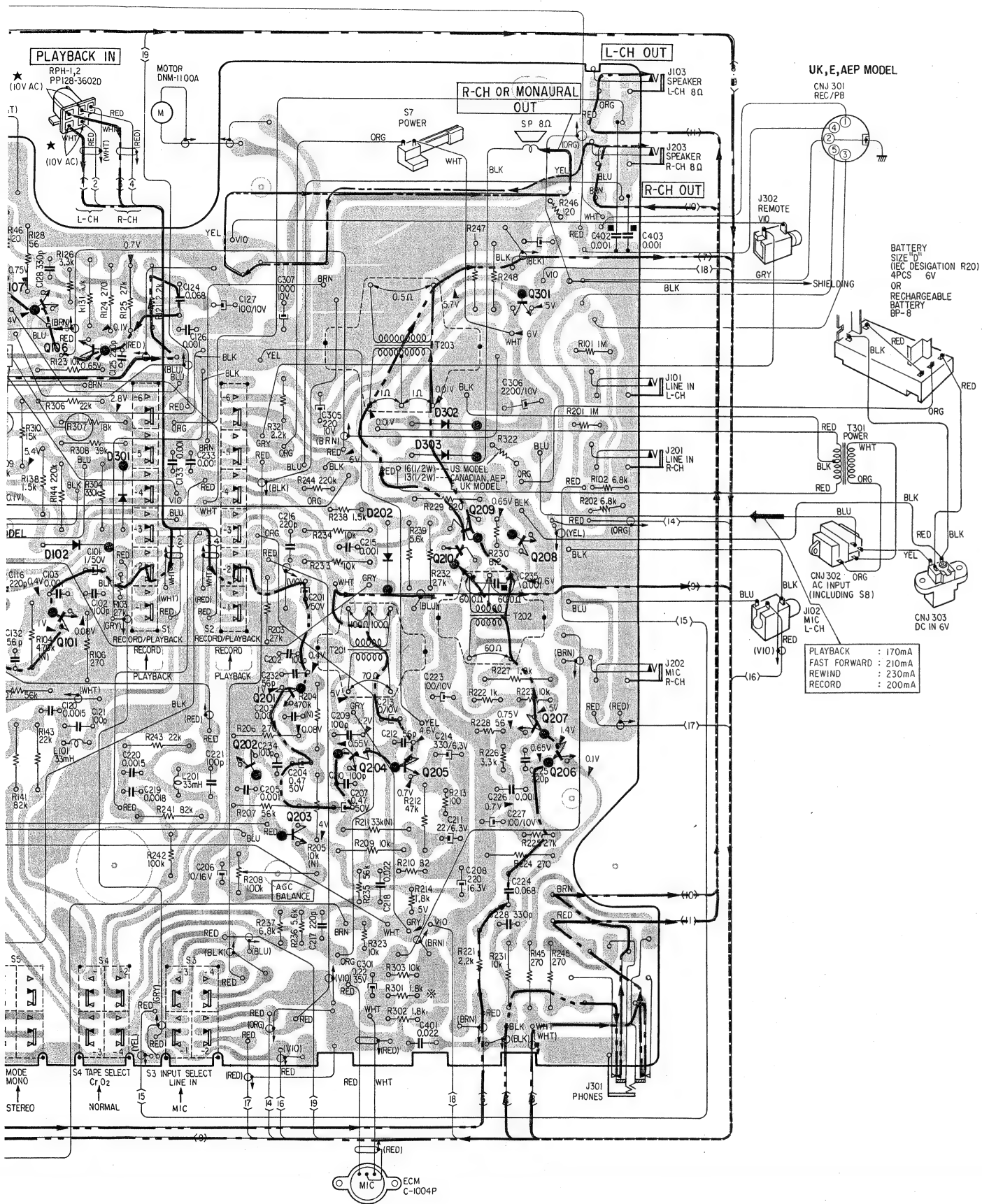
— Conductor Side —

E, AEP, UK model

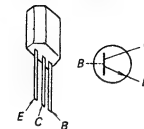
US mode : Serial No. 12,001 and later

Canadian model : Serial No. 10,501 and later

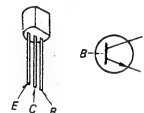




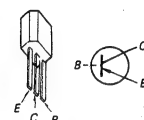
- Q101, 201 } : 2SC631A
Q104, 204 }
Q102, 202 }
Q103, 203 }
Q105~108 } : 2SC633A
Q205~208 }
Q111, 211 }
Q301, 303~305 }



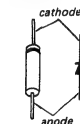
- Q109,209 } : 2SC1474
Q110,210 }



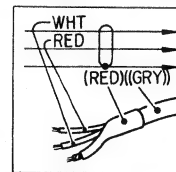
- Q302: 2SA677**







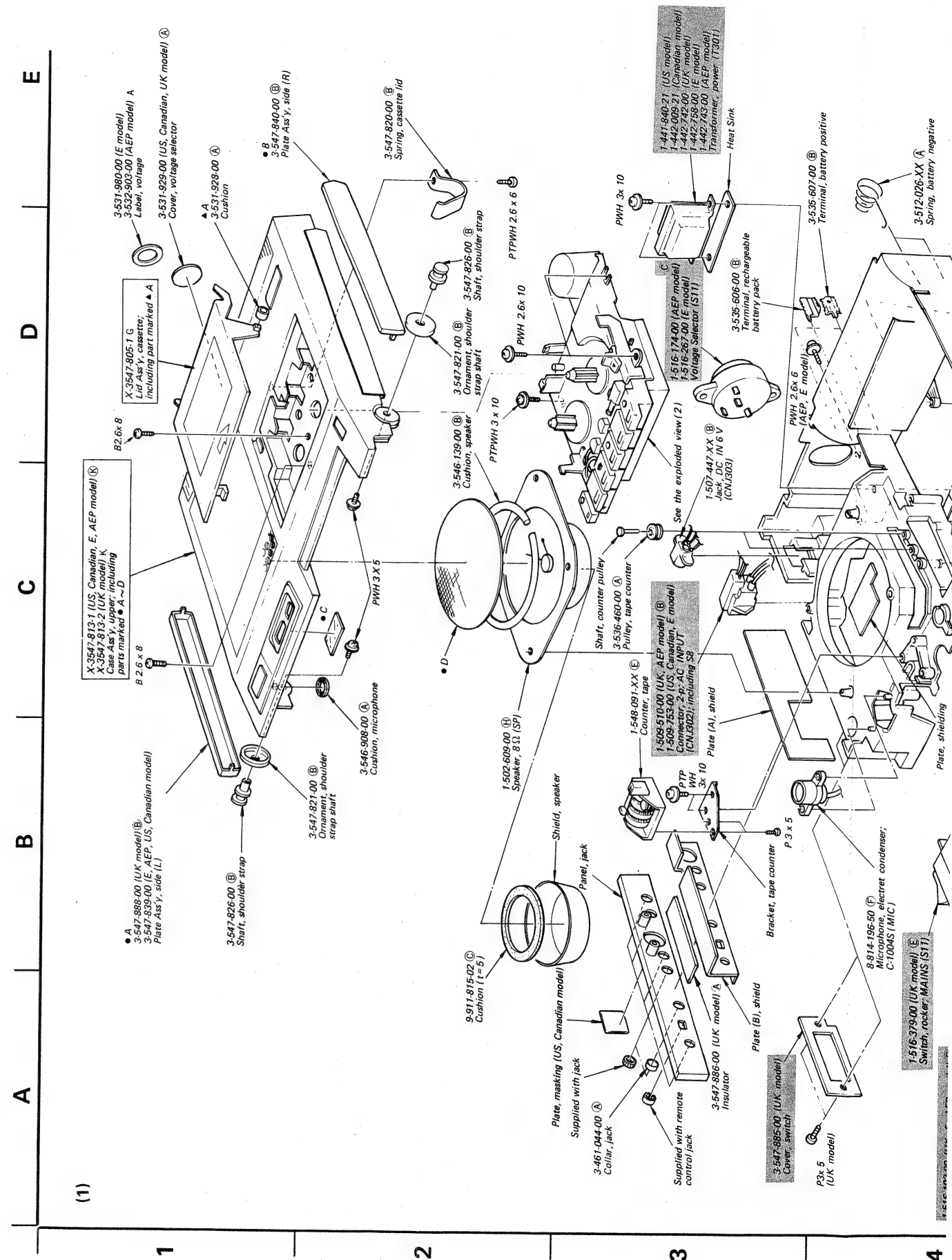
- D101, 102 : 1T40
D201, 202 : 1T40
D301: 1T22
D302, 303: 10E1

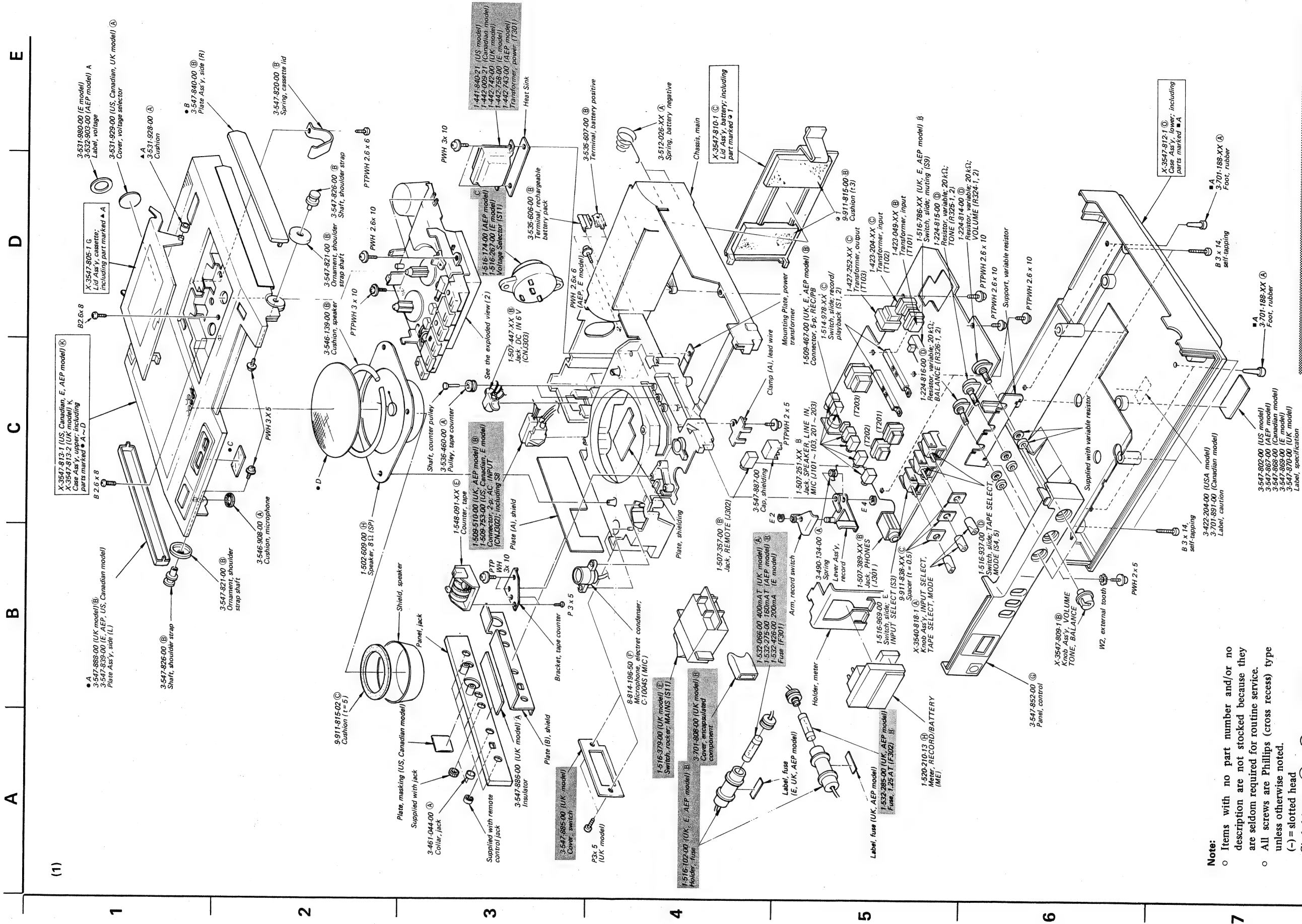


- Note:**
- ■ indicates parts on the conductor side.
 - — indicates lead wire connection on the conductor side.
 - ○ indicates lead wire connection through the component side.



-  indicates B+ pattern.
- SIGNAL PATH
 -  L-CH
 -  R-CH OR MONAURAL
 -  MONAURAL





Note: The components identified by shading are critical for safety. Replace only with part number specified.

Note:

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
- (-) = slotted head
- Circled letters (A to Z) are applicable to European models only.



Note:



- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
- (-) = slotted head
- Circled letters (A) to (Z) are applicable to European models only.
- (□□T) shows the number of coils in spring.

SECTION 6 ELECTRICAL PARTS LIST

Note: Circled letters (A) to (Z) are applicable to European models only.

Note: Circled letters (A) to (Z) are applicable to European models only.

Ref. No.	Part No.	Description
PRINTED CIRCUIT BOARD		
	1-583-250-00	(A) Record/Playback Head
SEMICONDUCTORS		
Transistors		
⇒ Q101,201	8-726-368-10	(B) 2SC632A
⇒ Q102,202	8-726-388-00	(B) 2SC634A
⇒ Q103,203	8-726-388-00	(B) 2SC634A
⇒ Q104,204	8-726-368-10	(B) 2SC632A
⇒ Q105~108	8-726-388-00	(B) 2SC634A
⇒ Q205~208	8-726-388-00	(B) 2SC634A
Q109,209	8-726-335-10	(B) 2SC1474
Q110,210	8-726-388-00	(B) 2SC634A
⇒ Q111,211	8-726-388-00	(B) 2SC634A
⇒ Q301	8-726-388-00	(B) 2SC634A
⇒ Q302	8-726-786-01	(B) 2SA678
⇒ Q303~305	8-726-388-00	(B) 2SC634A
Diodes		
⇒ D101,201	8-719-815-55	(B) 1S1555
⇒ D102,202	8-719-722-21	(A) 1T22A
⇒ D302,303	8-719-210-02	(B) 10D2
⇒ D304,305	8-719-210-02	(B) 10D2 (AEP, UK model)
Thermistor		
Th	1-800-198-XX	(A) S-1250
COILS		
L101,201	1-407-212-XX	(B) Microinductor, 33 mH
L301	1-407-195-XX	(B) Microinductor, 1 mH
TRANSFORMERS		
T101,201	1-423-049-XX	(B) Input
T102,202	1-423-204-XX	(C) Input

⇒: Due to replacement parts, the descriptions are different from the diagrams.

Note: The components identified by shading are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description
T103,203	1-427-252-XX	(C) Output
T301	1-441-840-21	Power (US model)
	1-442-009-21	Power (Canadian model)
	1-442-742-00	Power (UK model)
	1-442-743-00	Power (AEP model)
	1-442-785-00	Power (E model)
T302	1-433-177-00	(C) Bias Osc
CAPACITORS		
All capacitors are in μ F and electrolytic unless otherwise noted. (p = μ F) 50WV or less are not indicated except for electrolytics.		
C101,201	1-121-391-11	(A) 1 50V
C102,202	1-102-975-11	(A) 100p ceramic
C103,203	1-101-455-11	(A) 0.001 ceramic
C104,204	1-121-726-11	(A) 0.47 50V
C105,205	1-101-455-11	(A) 0.001 ceramic
C106,206	1-121-651-11	(A) 10 16V
C107,207	1-121-726-11	(A) 0.47 50V
C108,208	1-121-419-11	(A) 220 6.3V
C109,209	1-102-975-11	(A) 100p ceramic
C110,210	1-102-975-11	(A) 100p ceramic
C111,211	1-131-190-11	22 6.3V tantalum
C112,212	1-101-881-11	(A) 10 ceramic
C113,213	1-212-651-11	(A) 10 16V
(US model: Up to serial No. 12,000 Canadian model: Up to serial No. 10,500)		
C113,213	1-131-193-11	(B) 10 10V tantalum
(US model: serial No. 12,001 and later Canadian model: serial No. 10,501 and later)		

Ref. No.	Part No.	Description
C114,214	1-121-751-11	(A) 330 6.3V
C115,215	1-108-227-12	(A) 0.001 mylar
C116,216	1-102-110-11	(A) 220p ceramic
C117,217	1-102-110-11	(A) 220p ceramic
C118,218	1-108-242-12	(A) 0.022 mylar
C119,219	1-108-352-12	(A) 0.0018 mylar
C120,220	1-108-227-12	(A) 0.001 mylar
C121,221	1-107-169-11	(A) 100p 500V silvered mica
C122,222	1-108-239-12	(A) 0.01 mylar
C123,223	1-121-414-11	(A) 100 10V
C124,224	1-108-249-12	(A) 0.068 mylar
C125,225	1-102-112-11	(A) 330p ceramic
C126,226	1-101-455-11	(A) 0.001 ceramic
C127,227	1-121-414-11	(A) 100 10V
C128,228	1-102-112-11	(A) 330p ceramic
C129,229	1-107-206-12	(A) 15p 500V silvered mica
C130,230	1-107-210-12	(A) 22p 500V silvered mica
C131,231	1-107-159-12	(A) 33p 500V silvered mica
C132,232	1-101-885-11	(A) 56p ceramic
C133,233	1-101-455-11	(A) 0.001 ceramic
C134,234	1-102-975-11	(A) 100p ceramic
C135,235	1-102-074-11	(A) 0.001 ceramic
C301	1-131-211-11	(B) 0.22 10V tantalum
C302	1-121-968-11	(B) 20 16V
C303	1-131-193-11	(B) 10 10V tantalum
C304,305	1-121-420-11	(A) 220 10V
C306	1-121-659-11	(B) 2200 10V
C307	1-121-736-11	(B) 1000 10V
C308	1-101-455-11	(A) 0.001 ceramic
C309	1-121-414-11	(A) 100 10V
C310	1-108-384-12	(B) 0.039 100V mylar
C311	1-108-379-12	(A) 0.015 100V mylar
C312	1-129-707-11	(A) 0.0027 630V plastic
C313~315	1-121-651-11	(A) 10 16V
C316	1-121-392-11	(A) 3.3 25V
C401	1-108-242-12	(A) 0.022 mylar
C402,403	1-108-227-12	(A) 0.001 mylar

Ref. No.	Part No.	Description
RESISTORS		
All resistors are in ohms. Common $\frac{1}{4}$ W carbon resistors are omitted. Check schematic diagram for values. (k = 1000)		
R208	1-224-648-XX	(B) 100 k, adjustable
R317	1-224-644-XX	(B) 4.7 k, adjustable
R322	1-244-828-11	(A) 13 $\frac{1}{4}$ W carbon (Canadian, UK, AEP, E model)
	1-244-830-11	(A) 16 $\frac{1}{4}$ W carbon (US model)
R324-1,2	1-224-814-00	(D) 20 k, variable; VOLUME
R325-1,2	1-224-815-00	(D) 20 k, variable; TONE
R316-1,2	1-224-816-00	(D) 20 k, variable; BALANCE
SWITCHES		
S1,2	1-514-978-XX	(C) Slide, record/playback
S3	1-516-969-00	(E) Slide, INPUT SELECT
S4,5	1-516-937-00	(D) Slide, TAPE SELECT, MODE
S6,7	1-516-853-XX	(C) Leaf, forward muting; power
S8		Included in CNJ302
S9	1-514-346-00	(B) Leaf, muting; CUE/REVIEW
S10	1-516-786-XX	(B) Slide, muting (UK, E, AEP model)
S11	1-516-174-00	(C) Voltage Selector (AEP model)
	1-516-267-00	Voltage Selector (E model)
	1-516-379-00	(E) Rocker, MAINS (UK model)
JACKS		
J101~103	1-507-251-XX	(B) SPEAKER, LINE IN, MIC
J201~203	1-507-389-XX	(B) PHONES (Headphones)
J301	1-507-389-XX	(B) PHONES (Headphones)
J302	1-507-357-00	(B) REMOTE
J303	1-509-467-00	(B) Connector, 5-p; REC/PB (UK, E, AEP model)

Note: The components identified by shading are critical for safety. Replace only with part number specified.

Note: Circled letters (A) to (Z) are applicable to European models only.

Ref. No.	Part No.	Description
CNJ302	1-509-510-00	(B) Connector, 2-p; AC INPUT; including S8 (UK, AEP model)
	1-509-753-00	(B) Connector, 2-p; AC INPUT; including S8 (US, Canadian, E model)
CNJ303	1-507-447-XX	(B) DC IN 6V

MISCELLANEOUS

CP	1-231-057-31	(B) Encapsulated Component, C-R
EH	8-825-506-00	(D) Head, erase; EF135-36
F301	1-532-066-00	(A) Fuse, 400 mA (UK model)
	1-532-275-00	(B) Fuse, 160 mA (AEP model)
	1-532-426-00	(B) Fuse, 200 mA (E model)
F302	1-532-285-00	(B) Fuse, 1.25 A (UK, AEP model)
M	8-834-009-10	(K) Motor, DNM-1200A
MIC	8-814-196-50	(F) MICROPHONE, electret condenser; C-1004S
ME	1-520-210-13	(H) Meter, RECORD/BATTERY
RPH	8-829-236-24	(K) Head, record/playback; PP128-3602D
SP	1-502-609-00	(H) Speaker, 8Ω
	1-516-102-00	(B) Holder, fuse (UK, E, AEP model)

Ref. No.	Part No.	Description
ACCESSORIES AND PACKING MATERIALS		
	Part No.	Description
X-3547-814-0	(H)	Strap, shoulder
X-3701-018-2	(A)	Tips Ass'y, cleaning
1-526-565-00		Adapter, ac plug (E model)
1-528-022-00		Battery, size-D; IEC designation R20 (E model)
1-534-032-01	(E)	Cord, connection; RK-50
1-534-830-00		Cord, power; DK-33H (E model)
1-534-840-XX	(D)	Cord, power (AEP model)
1-534-867-11		Cord, power; DK-35 (US model)
1-551-002-XX		Cord, power; DK-36 (Canadian model)
1-551-218-00	(E)	Cord, power (UK model)
3-544-142-00	(B)	Bag, plastic; unit
3-547-835-00		Cushion (E model)
3-547-851-00	(B)	Case, carrying
3-547-857-00	(B)	Cushion, carrying case
3-547-858-00	(B)	Cushion, speaker
3-547-859-00	(E)	Carton
3-547-862-00	(A)	Sheet (A), protection
3-547-863-00	(A)	Sheet (B), protection
3-547-865-00	(C)	Cushion, unit
3-701-683-00		Card, voltage (E model)
3-701-684-00	(B)	Card, voltage (AEP model)
3-780-964-11	(B)	Manual, instruction (UK, E, AEP model)
3-780-964-21		Manual, instruction (US model)
3-780-964-31		Manual, instruction (Canadian model)
3-793-408-11	(A)	Card, cassette
3-793-828-11	(A)	Card, cassette (UK, E, AEP model)
3-793-965-21	(A)	Pamphlet, BM series
3-794-001-31		Manual, instruction; French (Canadian model)

Note: The components identified by shading are critical for safety. Replace only with part number specified.

SS-16A



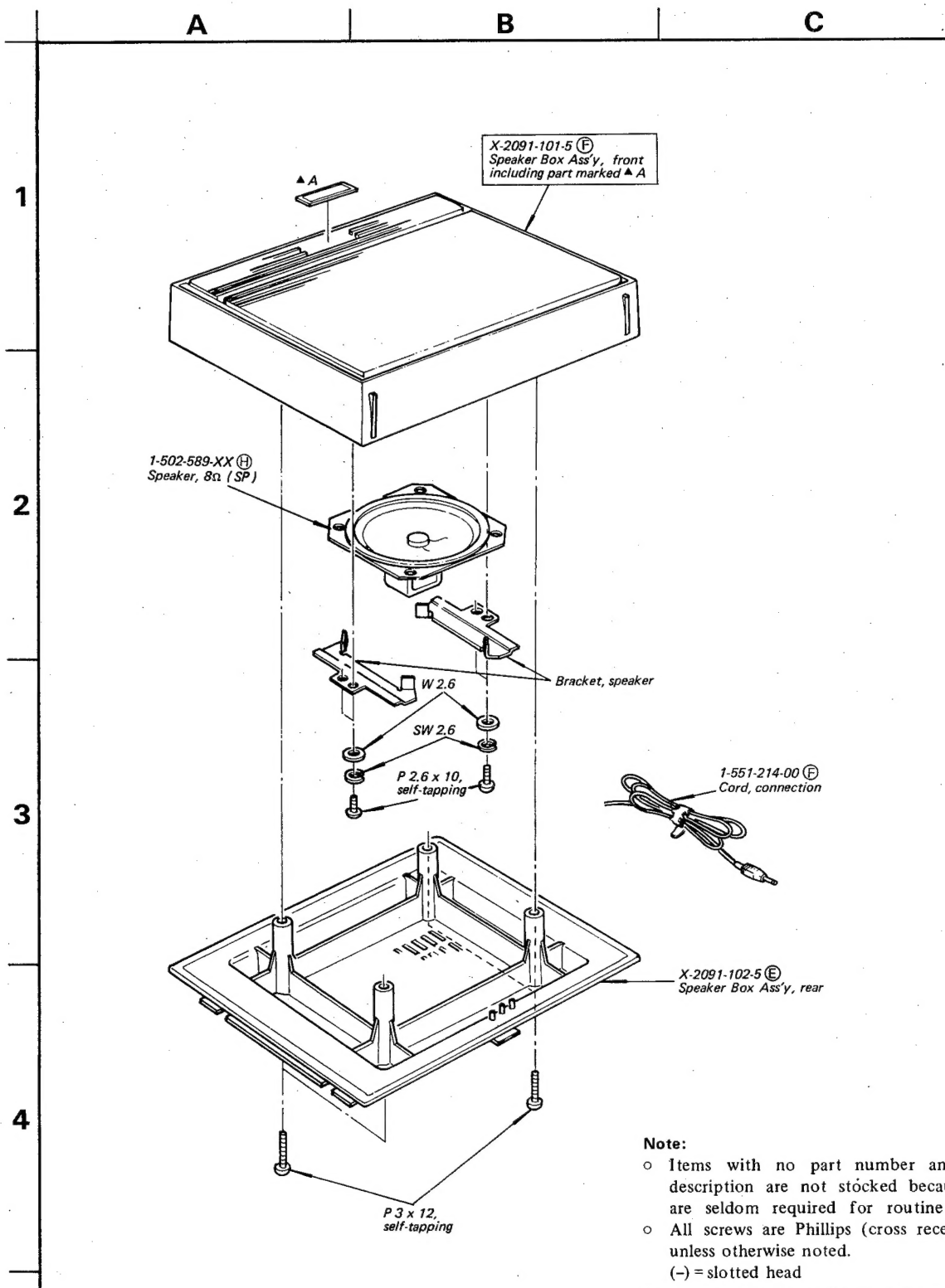
SPEAKER SYSTEM

SPECIFICATIONS

- Dimensions:** 253 (w) x 173 (h) x 73 (d) mm
10 (w) x $6\frac{13}{16}$ (h) x $2\frac{7}{8}$ (d) inches
- Weight:** 0.8 kg, 1 lb 12 oz
- Speaker:** 8 Ω , 10 cm (4 inches) dia.

SONY[®]
SERVICE MANUAL

EXPLODED VIEW



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